



World class

Horticultural lighting

Product catalog 2014



“Using electronic ballasts reduced our electricity use by more than 5% while improving the light levels with 6%, a total 11% more efficiency”



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Gavita horticultural lighting

Innovation & reliability



“Gavita is synonymous
for innovation, quality and
customer satisfaction”

Gavita is the oldest specialized horticultural lighting company, building on 30 years of accumulated knowledge and innovation. In 1994 Gavita introduced their first GAN fixtures to the market. Since then Gavita innovations have become industry standards.

Gavita introduced for example the 600W HPS lamp in 1995, the famous internal reflector lamp in 1998, Miro aluminum reflectors in 2002, the first (adjustable) electronic ballasts in 2003 and recently in 2010 their solid state Light Emitting Plasma fixture. For greenhouses and indoor facilities we design lighting plans using high-tech computer models. Testing facilities include an Ulbricht integrating sphere for accurate light measurements. Gavita develops and implements new technology, such as plasma light and high frequency electronic ballasts. Our innovative reflector designs offer the highest efficiency in the market.

Gavita has developed into one of the leading authorities in the area of assimilation lighting. Gavita serves customers world-wide. Our installations range from 1 - 50.000 units per customer. As a development partner of Philips, General Electric and Osram, Gavita designs and produces state of the art electronic ballasts, high efficiency reflectors and complete fixtures. We pursue customer satisfaction and product excellence. Always in the forefront of technology, Gavita is synonymous for innovation, quality and customer satisfaction.

Gavita is comprised of several companies and joint ventures in Norway, The Netherlands, Canada, Ukraine and Russia.



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GAN Electronic

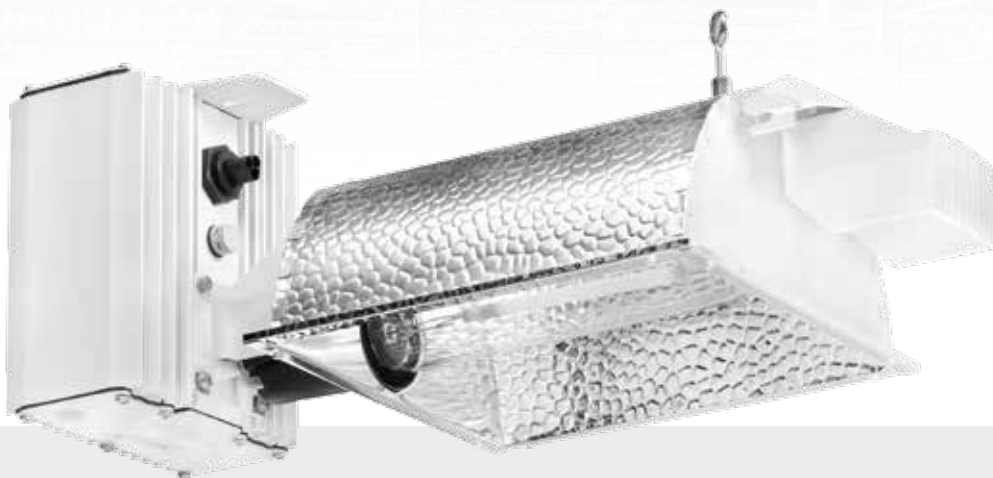
Electronic fixtures

GAN Electronic 600W

Available for:

240 V - 277 V | 277 V | 347 V | 400 V | 480 V | E39/E40

The most efficient 600W lamp combined with a highly efficient reflector, brought together in a very small footprint fixture. The reliable and efficient electronics save energy compared to electromagnetic ballasts. Also available in a dimmable version.



Features/benefits

- Specifically designed for use with Philips 600 Watt 400 Volt EL lamps
 - No acoustic resonance
 - High output and improved spectrum
 - High light maintenance
- System design and concept by Gavita
- Available in a wide range of supply voltages
- Sealed housing with Gore-Tex ventilation plug
- Microprocessor driven, LED-status indicator
- Very low heat dissipation and optimal cooling
- Driver efficiency at full power: 95-96%
- Ecomax HR96 reflector (96% efficiency)

Recommended lamps

GreenPower Plus 600W EL
Lucalox PSL 400V 600W

Grow light (PPF)

1.190 $\mu\text{mol s}^{-1}$
1.120 $\mu\text{mol s}^{-1}$

Luminous Flux

89.000 lumen
85.000 lumen

Lamp base

E39/E40
E39/E40

Technical specifications

	240 V / 277 V	277 V	347 V	400 V	480 V
Input Voltage	: 240 - 277 V (+/- 10%)	277 V (+/- 10%)	347 V (+/- 10%)	400 V (+/- 10%)	480 V (+/- 10%)
Input current	: 2,29 A	2,35 A	1,86 A	1,58 A	1,37 A
Real input power	: 632 W ($\pm$ 3%)	635 W ($\pm$ 3%)	640 W ($\pm$ 3%)	632 W ($\pm$ 3%)	645 W ($\pm$ 3%)
Apparent power	: 648 VA ($\pm$ 3%)	652 VA ($\pm$ 3%)	653 VA ($\pm$ 3%)	645 VA ($\pm$ 3%)	659 VA ($\pm$ 3%)
Power factor	: > 0,98	> 0,98	> 0,98	> 0,98	> 0,98
Inrush current	: 34 A / 1,6 mSec	17 A	20 A	34 A / 1,6 mSec	45 A
Light source	: High Pressure Sodium 600 Watt 400 Volt Electronic				

Input frequency	: 48 - 63 Hz
Electrical insulation	: Class I / IP 21
Input connection	: Wieland RST IP 65
Dimensions	: 545 mm (length) x 254 mm (width) x 209 mm (height excl. mounting hooks)
Weight	: Ca 3,5 kg (without mounting hooks)
Operation temp.	: 0 - 35°C
Relative humidity	: 25 - 70% (non-condensing)
Reflector	: Ecomax HR96 Reflector

GAN Electronic 750W DE

Available for:
277 V | 347 V | 400 V | 480 V

NEW
model
2014

In some cases neither 600W or 1000W provides a right fit. For these situations Gavita developed a new double ended 750W 400V electronic HPS lamp with an extremely high output of 1450 $\mu\text{mol s}^{-1}$. This new lamp is 8-10% more efficient than the traditional 750W 400V single ended lamps. Exclusively available from Gavita, this lamp is the most efficient 750W 400V lamp on the market today.



Features/benefits

- Specifically designed for use with Gavita Pro 750W 400V Electronic DE lamp
 - No acoustic resonance
 - High output and improved spectrum
 - High light maintenance
- System design and concept by Gavita
- Available in a wide range of supply voltages
- Sealed housing with Gore-Tex ventilation plug
- Microprocessor driven, LED-status indicator
- Very low heat dissipation and optimal cooling
- Driver efficiency at full power: 95-96%
- Ecomax HR96 reflector (96% efficiency)

“The 750W lamp proved to be the **perfect balance** between light level and uniformity”

Suitable lamp

Gavita Pro 750W 400V Electronic DE

Grow light (PPF)

1.500 $\mu\text{mol s}^{-1}$

Luminous Flux

111.900 lumen

Lamp base

K12 x 30s

Technical specifications

	277 V	347 V	400 V
Input Voltage	: 277 V (+/- 10%)	347 V (+/- 10%)	400 V (+/- 10%)
Input current	: 2,96 A	2,35 A	2,03 A
Real input power	: 795 W ($\pm$ 3%)	800 W ($\pm$ 3%)	795 W ($\pm$ 3%)
Apparent power	: 804 VA ($\pm$ 3%)	816 VA ($\pm$ 3%)	811 VA ($\pm$ 3%)
Power factor	: > 0,99	> 0,98	> 0,98
Inrush current	: 30 A	20 A	30 A
Light source	: High Pressure Sodium 750 Watt 400 Volt Electronic		

480 V
480 V (+/- 10%)
1,66 A
773 W ($\pm$ 3%)
781 VA ($\pm$ 3%)
> 0,99
30 A

Input frequency	: 48 - 63 Hz
Electrical insulation	: Class I / IP 21
Input connection	: Wieland RST IP 65
Dimensions	: 545 mm (length) x 254 mm (width) x 209 mm (height excl. mounting hooks)
Weight	: Ca 3,4 kg (without mounting hooks)
Operation temp.	: 0 - 35°C
Relative humidity	: 25 - 70% (non-condensing)
Reflector	: Ecomax HR96 Reflector

GAN Electronic 1000W

Available for:
277 V | 347 V | 400 V | 480 V

The Philips 1000W double ended lamp with the specifically for this lamp developed high frequency electronic ballast form the basis of the highly efficient electronic fixture. Already in its third generation, this lamp / ballast combination is the most efficient match available today.



Features/benefits

- Specifically designed for use with Philips 1000W 400V EL lamps
 - No acoustic resonance
 - High output and improved spectrum
 - High light maintenance
- System design and concept by Gavita
- Available in a wide range of supply voltages
- Sealed housing with Gore-Tex ventilation plug
- Microprocessor driven, LED-status indicator
- Very low heat dissipation and optimal cooling
- Driver efficiency at full power: 95-96%
- Ecomax HR96 reflector (96% efficiency)

“The double ended lamp is **the most efficient lamp** we ever used”

Recommended lamps

GreenPower Plus 1000W EL
Gavita Pro Plus 1000W EL

Grow light (PPF)

2.100 $\mu\text{mol s}^{-1}$
2.100 $\mu\text{mol s}^{-1}$

Luminous Flux

150.000 lumen
150.000 lumen

Lamp base

K12 x 30s
K12 x 30s

Technical specifications

	277 V	347 V	400 V
Input Voltage	: 277 V (+/- 10%)	347 V (+/- 10%)	400 V (+/- 10%)
Input current	: 3,85 A	3,06 A	2,6 A
Real input power	: 1045 W ($\pm$ 3%)	1040 W ($\pm$ 3%)	1032 W ($\pm$ 3%)
Apparent power	: 1056 VA ($\pm$ 3%)	1051 VA ($\pm$ 3%)	1042 VA ($\pm$ 3%)
Power factor	: > 0,98	> 0,98	> 0,98
Inrush current	: 17 A	20 A	35 A / 1,6 mSec
Light source	: High Pressure Sodium 1000 Watt 400 Volt Electronic		

480 V
480 V (+/- 5%)
2,21 A
1030 W ($\pm$ 3%)
1040 VA ($\pm$ 3%)
> 0,99
30 A

Input frequency	: 48 - 63 Hz
Electrical insulation	: Class I / IP 21
Input connection	: Wieland RST IP 65
Dimensions	: 545 mm (length) x 254 mm (width) x 209mm (height excl. mounting hooks)
Weight	: Ca 4,1 kg (without mounting hooks)
Operation temp.	: 0 - 35°C
Relative humidity	: 25 - 70% (non-condensing)
Reflector	: Ecomax HR96 Reflector



GAN Light Emitting Plasma

Plasma fixtures

Light Emitting Plasma

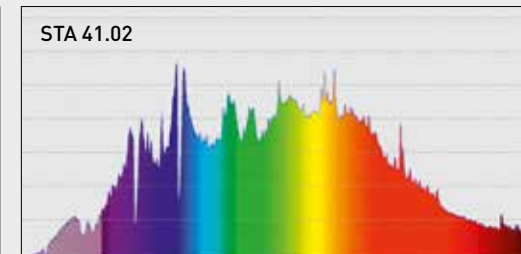
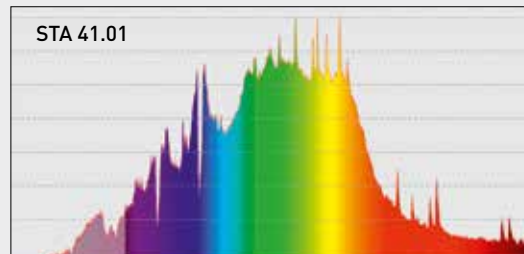


Plants have developed under sunlight for millions of years. Recent research shows that the optimal light for a plant is the full continuous spectrum of the sun. Until now it was difficult or very expensive to create light with those qualities. Light Emitting Plasma (LEP) is a new technology which makes it possible to create quality light close to the spectrum of the sun, including UVA and UVB.

The GAN 270/300 LEP is a plasma luminaire without any moving parts, making it suitable for climate room and greenhouse conditions. It is available as a convection cooled version or an air cooled version and offers a choice of two different spectra. The LUXIM STA 41.01 emitter is developed to add the missing spectrum in a HPS lamp, and is primarily used in combination with a HPS lamp. The STA 41.02 emitter provides high quality sunlight with a full continuous spectrum, and is most suitable for climate rooms and sun simulation. Unlike the HPS lamp the plasma lamp emits very little infra red radiation. The rated lifetime is 30.000 hours for the 41.02 emitter up to 50.000 hours for the 41.01 emitter. The GAN 270/300 LEP was nominated for the Horti Fair Innovation Award 2011.

“Gavita sets
new standards
in the lighting
industry”

Available emitters	Grow light (PPF)	Luminous Flux	Rated lifetime
LUXIM STA 41.01	310 $\mu\text{mol s}^{-1}$	21.000 lumen	50.000 hrs
LUXIM STA 41.02	300 $\mu\text{mol s}^{-1}$	17.000 lumen	30.000 hrs



GAN 270 LEP

Suitable for:
100 - 240 V

The GAN 270 LEP is based on the LUXIM STA41 series light emitting plasma (LEP) emitters. The horticultural fixture is completely sealed, has no fans or moving parts and is therefore completely quiet and durable. The GAN 270 LEP provides a high quality full continuous spectrum, including UVA and UVB with very little infrared radiation. The GAN 270 LEP is ideally suited for sunlight simulation, climate rooms or as additional quality spectrum lighting in conjunction with HPS light.



Features/benefits

- Solid State Plasma: no moving parts or fans
- Sealed housing with Gore-Tex ventilation plug
- Miro Aluminum reflector, square light pattern
- High quality float glass wide spectrum glass filter
- Fine mesh filter shields EMI from lamp
- Reflector efficiency incl. filter and mesh losses 83%
- Switchable with 0-10V (RJ12 interface)
- Full spectrum light including UVA and UVB, low IR
- 41.01 emitter: Spectrum optimized for supplemental light to HPS
- 41.02 emitter: Color temperature 5600 K, CRI 94
- Rated average lamp lifetime of 30.000 hours (41.02) or 50.000 hours (41.01)
- Universal power supply (100-240 V)

Technical specifications

Input Voltage : 100 - 240 V (+/- 3%)
Input current : 1,36 A at 230 V
Real input power : 300 W ($\pm 3\%$)*
Apparent power : 306 VA ($\pm 3\%$)
Power factor : > 0,98
Light source : LUXIM LiFi STA 41.01 or 41.02 plasma emitter
Input frequency : 48 - 63 Hz

Electrical insulation : Class I / IP 21
Input connection : IEC C13
Dimensions : 580 mm (length) x 268 mm (width) x 190 mm (height)
Weight : 10,5 kg, 23 lbs
Operation temp. : 0 - 35°C
Relative humidity : 25 - 70% (non-condensing)

* 300 W at start-up, 270W operational power

GAN 300 LEP AC

Suitable for:
100 - 277 V

The GAN 300 LEP AC is the air cooled version of our Light Emitting Plasma series. All heat dissipating parts (emitter, driver and power supply) have been mounted in a 150mm/6" tube, which allows for forced cooling. This fixture can only be used with forced air cooling, and required 30-50 m³/h air flow for cooling (depending on intake air temperature). The electronics have a double temperature safety feature, which will automatically reset. The GAN 300 LEP AC is specifically suitable for climate rooms with recirculating climate control and CO₂, where you do not want to add heat to the environment. The emitter only emits 4% of IR and is shielded by a wide spectrum filter and a fine wire mesh to shield EMI.



Features/benefits

- Solid State Plasma: no moving parts or fans
- Sealed housing with Gore-Tex ventilation plug
- Miro Aluminum reflector, square light pattern
- High quality float glass wide spectrum glass filter
- Fine mesh filter shields EMI from lamp
- Reflector efficiency incl. filter and mesh losses 83%
- Full spectrum light including UVA and UVB, low IR
- 41.01 emitter: Spectrum optimized for supplemental light to HPS
- 41.02 emitter: Color temperature 5600 K, CRI 94
- Rated average lamp lifetime of 30.000 hours (41.02) or 50.000 hours (41.01)
- Optional: adjustable with 0-10 V
- Universal power supply (100-277 V)

Technical specifications

Input Voltage	: 100 - 277 V (+/- 3%)
Input current	: 1,36 A at 230 V
Real input power	: 300 W (± 3%)*
Apparent power	: 306 VA (± 3%)
Power factor	: > 0,98
Light source	: LUXIM LiFi STA 41.01 or 41.02 plasma emitter
Input frequency	: 48 - 63 Hz

Electrical insulation	: Class I / IP 21
Input connection	: Wieland RST IP 65
Dimensions	: 580 mm (length) x 240 mm (width) x 240 mm (height excl. mounting hooks)
Weight	: Ca 7,5 kg (without mounting hooks)
Operation temp.	: 0 - 35°C
Relative humidity	: 25 - 70% (non-condensing)

* 300 W at start-up, 270W operational power



GAN Electromagnetic

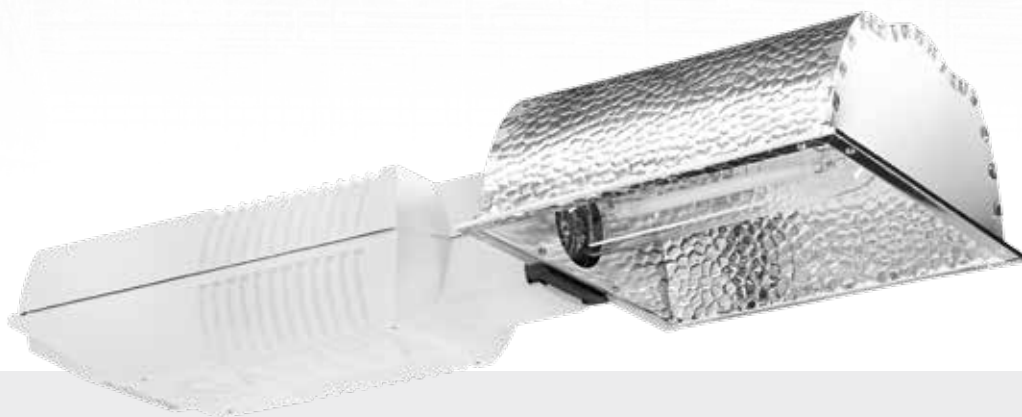
Electromagnetic fixtures



GAN 4-550 AL 230V SuperAgro

Suitable for:
220 / 225 / 230 V | E39/E40

The GAN electromagnetic fixtures are extremely reliable work horses. The 4-550 Superagro model comes in the easy to service aluminum housing which provides optimal cooling. Based on proven technology this 230V fixtures is a trouble free and durable investment.



Features/benefits

- Reliable magnetic ballast
- Separate connections for 220/225/230V
- Dual output (400W / 550W HPS overrun)
- For 230V HPS/MH lamps
- Aluminum housing for optimal cooling
- Easy to service
- Tridonic components
- Ecomax HR96 reflector (96% efficiency)

Recommended lamps

GreenPower CG T 400W
Lucalox PSL 230V 400W
Plantastar 230V 400W
Powerstar HQI 400W
HPI-T 400W/645

Grow light (PPF)

725 $\mu\text{mol s}^{-1}$
710 $\mu\text{mol s}^{-1}$
725 $\mu\text{mol s}^{-1}$
-
-

Luminous Flux

58.500 lumen
56.500 lumen
56.500 lumen
32.000 lumen
32.000 lumen

Lamp base

E39/E40
E39/E40
E40
E39/E40
E39/E40

Technical specifications

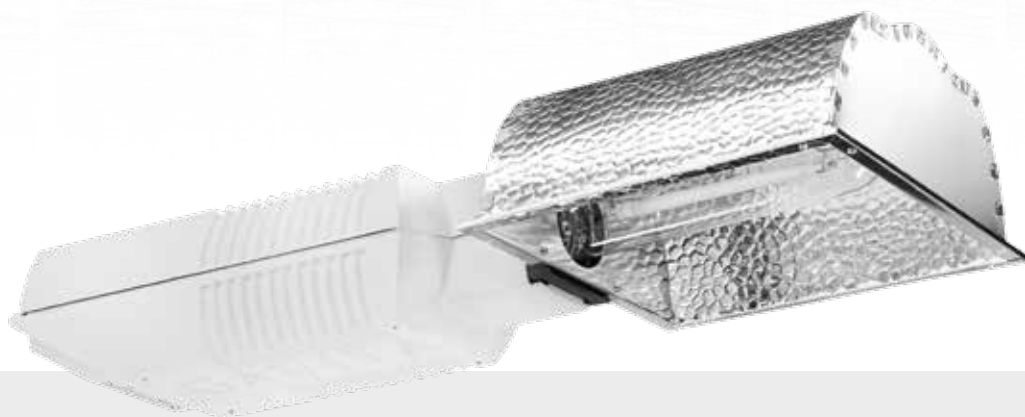
	400 W	550 W
Input Voltage	: 220 / 225 / 230 V (+/- 10%)	
Input current	: 2,1 A	2,7 A
Real input power	: 450 W ($\pm 5\%$)	590 W ($\pm 5\%$)
Apparent power	: 485 VA ($\pm 5\%$)	620 VA ($\pm 5\%$)
Power factor	: > 0,9	> 0,9
Light source	: HPS 400W, MH 400W, CMH 400W	HPS 400W

Input frequency	: 50 Hz
Electrical insulation	: Class I / IP 23
Input connection	: Cable input
Dimensions	: 420 mm (length) x 140 mm (width) x 110 mm (height) (without reflector and brackets)
Weight	: Ca 6,5 kg (without mounting hooks)
Reflector	: Ecomax HR96 Reflector

GAN 6-750 AL 230V SuperAgro

Suitable for:
220 / 225 / 230 V | E39/E40

Using the GAN 6-750 you have a choice: You can power a 600W or a 750W lamp. This makes the GAN 6-750 the flexible choice and provides a path to higher light levels without extra investment.



Features/benefits

- Reliable magnetic ballast
- Separate connections for 220/225/230V
- Dual output (600W / 750W)
- For 230V HPS/MH lamps
- Aluminum housing for optimal cooling
- Easy to service
- Tridonic components
- Ecomax HR96 reflector (96% efficiency)

“Zero failures in
the 5 years we used
these ballasts”

Recommended lamps

GreenPower CG T 600W
Lucalox PSL 230V 600W
Plantastar 230V 600W
Lucalox PSL 230V 750W

Grow light (PPF)

1.100 $\mu\text{mol s}^{-1}$
1.080 $\mu\text{mol s}^{-1}$
1.100 $\mu\text{mol s}^{-1}$
1.320 $\mu\text{mol s}^{-1}$

Luminous Flux

88.000 lumen
90.000 lumen
90.000 lumen
112.000 lumen

Lamp base

E39/E40
E39/E40
E40
E39/E40

Technical specifications

	600 W	750 W
Input Voltage	: 220 / 225 / 230 V (+/- 10%)	
Input current	: 3,1 A	4,1 A
Real input power	: 660 W ($\pm 5\%$)	810 W ($\pm 5\%$)
Apparent power	: 730 VA ($\pm 5\%$)	900 VA ($\pm 5\%$)
Power factor	: > 0,9	> 0,9
Light source	: HPS 600 W	HPS 750 W

Input frequency	: 50 Hz
Electrical insulation	: Class I / IP 23
Input connection	: Cable input
Dimensions	: 420 mm (length) x 140 mm (width) x 110 mm (height) (without reflector and brackets)
Weight	: Ca 8,8 kg (without mounting hooks)
Reflector	: Ecomax HR96 Reflector

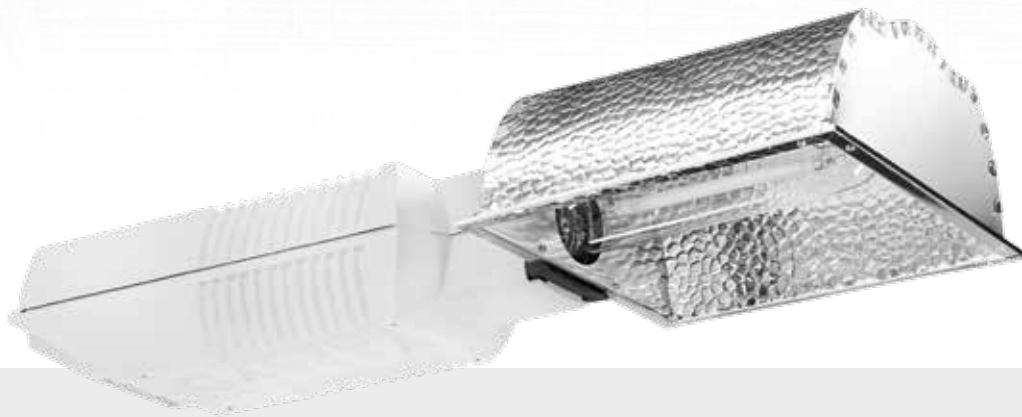
GAN 6-750 AL 400V SuperAgro

Suitable for:
390 / 400 V | E39/E40

Flexibility combined with efficiency. A 400V 3 phase wiring system provides many advantages over 230V systems. When available 400V 3 phase systems are always preferable over 230V. 400V systems use less current which reduces the installation costs considerably.

Features/benefits

- For 400 Volt HPS lamps
- Reliable magnetic ballast
- 400 V input, low current ballast
- Dual output (600 W / 750 W)
- Aluminum housing for optimal cooling
- Easy to service
- Tridonic components
- Ecomax HR96 reflector (96% efficiency)



Recommended lamps

GreenPower 600W 400V EM
Plantastar 600W 400V
Lucalox PSL 400V 600W
Lucalox PSL 400V 750W

Grow light (PPF)

1.120 $\mu\text{mol s}^{-1}$
1.150 $\mu\text{mol s}^{-1}$
1.120 $\mu\text{mol s}^{-1}$
1.360 $\mu\text{mol s}^{-1}$

Luminous Flux

87.500 lumen
87.000 lumen
85.000 lumen
104.000 lumen

Lamp base

E39/E40
E40
E39/E40
E39/E40

Technical specifications

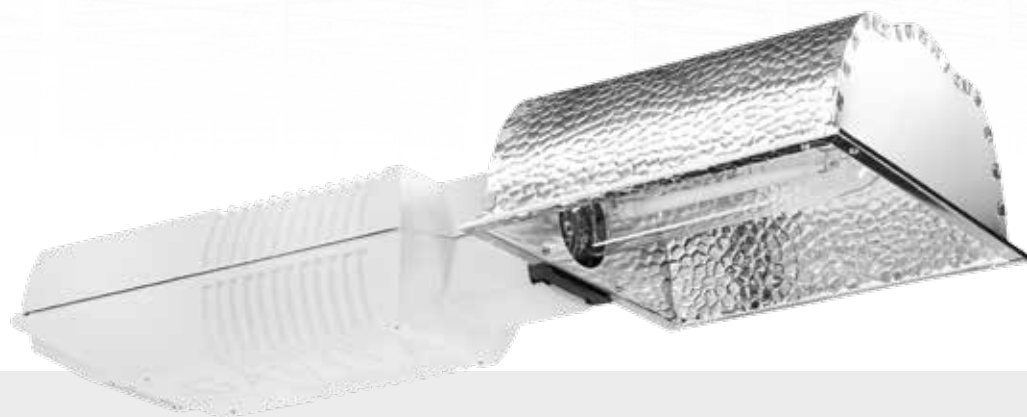
	600 W	750 W
Input Voltage	: 390 / 400 V (+/- 10%)	
Input current	: 1,85 A	2,4 A
Real input power	: 660 W ($\pm$ 5%)	810 W ($\pm$ 5%)
Apparent power	: 730 VA ($\pm$ 5%)	900 VA ($\pm$ 5%)
Power factor	: > 0,9	> 0,9
Light source	: HPS 600 W 400 V	HPS 750 W 400 V

Input frequency	: 50 Hz
Electrical insulation	: Class I / IP 23
Input connection	: Cable input
Dimensions	: 420 mm (length) x 140 mm (width) x 110 mm (height) (without reflector and brackets)
Weight	: Ca 6,5 kg (without mounting hooks)
Reflector	: Ecomax HR96 Reflector

GAN 600 AL E 347V

Available for:
347 V | E39/E40

Specifically developed for the North American market this fixture runs on 347V systems, driving the (GE Lucalox) 400V lamp, providing efficiency and low installation costs compared to lower voltage systems. The European design aluminum housing is durable, provides optimal cooling and easy access for servicing.



Features/benefits

- For 600 Watt 400 Volt HPS lamps
- Reliable magnetic ballast
- 347 V input, low current ballast
- Aluminum housing for optimal cooling
- Easy to service
- Tridonic components
- Ecomax HR96 reflector (96% efficiency)

“For us **reliability** is very important. GAN fixtures meet **our high standards**”

Recommended lamps

GreenPower 600W 400V EM
Lucalox PSL 400V 600W
Plantastar 600W 400V

Grow light (PPF)

1.120 $\mu\text{mol s}^{-1}$
1.120 $\mu\text{mol s}^{-1}$
1.150 $\mu\text{mol s}^{-1}$

Luminous Flux

87.500 lumen
85.000 lumen
87.000 lumen

Lamp base

E39/E40
E39/E40
E40

Technical specifications

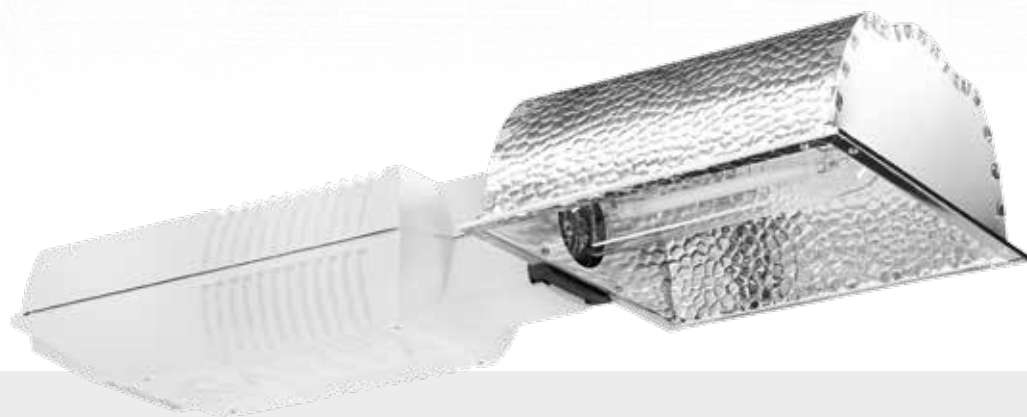
Input Voltage : 347 V (+/- 10%)
Input current : 2,1 A
Real input power : 645 W ($\pm$ 5%)
Apparent power : 717 VA ($\pm$ 5%)
Power factor : > 0,9
Light source : HPS 600W 400V (GE)
Input frequency : 60 Hz

Electrical insulation : Class I / IP 23
Input connection : Cable input
Dimensions : 420 mm (length) x 140 mm (width) x 110 mm (height)
(without reflector and brackets)
Weight : Ca 8,0 kg (without mounting hooks)
Reflector : Ecomax HR96 Reflector

GAN 600 AL E 480V

Available for:
480 V | E39

For North America Philips designed a special horticultural GreenPower lamp and ballast for 480V. Running at high voltage results in very low current and reduced voltage drops in the installation. The European design aluminum housing is durable, provides optimal cooling and easy access for servicing.



Features/benefits

- For 480 Volt 600 Watt Philips Greenpower HPS lamps
- Reliable magnetic ballast
- 480 V input, low current ballast
- Aluminum housing for optimal cooling
- Easy to service
- Tridonic components
- Ecomax HR96 reflector (96% efficiency)

Recommended lamps

GreenPower 600W 480V

Grow light (PPF)

1.200 $\mu\text{mol s}^{-1}$

Luminous Flux

84.500 lumen

Lamp base

E39

Technical specifications

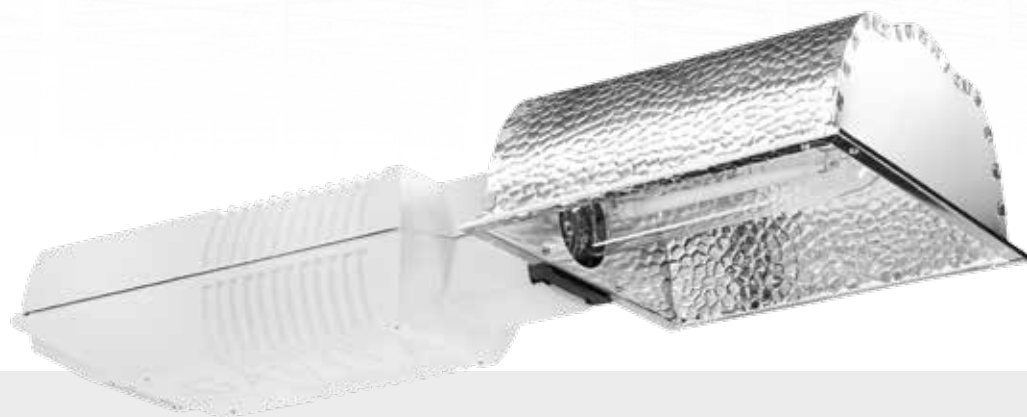
Input Voltage	: 480 V (+/- 10%)
Input current	: 1,4 A
Real input power	: 645 W ($\pm$ 3%)
Apparent power	: 717 VA ($\pm$ 3%)
Power factor	: > 0,9
Light source	: HPS 600W 480V (Philips)
Input frequency	: 60 Hz

Electrical insulation	: Class I / IP 23
Input connection	: Cable input
Dimensions	: 420 mm (length) x 140 mm (width) x 110 mm (height) (without reflector and brackets)
Weight	: Ca 6,5 kg (without mounting hooks)
Reflector	: Ecomax HR96 Reflector

GAN 750 AL E 347V

Available for:
347 V | E39

European reliability for North American professional installations. This fixture is developed for the GE Lucalox PSL 750W 400V lamp, providing high output against a reduced amount of fixtures compared to 600W systems. European inside and outside: Tridonic components in the durable aluminum Gavita housing.



Features/benefits

- For GE Lucalox PSL 750W 400V lamp
- Reliable magnetic ballast
- 347 V input, low current ballast
- Aluminum housing for optimal cooling
- Easy to service
- Philips components
- Ecomax HR96 reflector (96% efficiency)

“GAN fixtures can be opened without the use of tools, enabling **easy maintenance**”

Recommended lamps

Lucalox PSL 400V 750W

Grow light (PPF)

1.360 $\mu\text{mol s}^{-1}$

Luminous Flux

104.000 lumen

Lamp base

E39

Technical specifications

Input Voltage	: 347 V (+/- 10%)
Input current	: 2,54 A
Real input power	: 795 W ($\pm 5\%$)
Apparent power	: 883 VA ($\pm 5\%$)
Power factor	: > 0,9
Light source	: HPS 750W 400V (GE)
Input frequency	: 60 Hz

Electrical insulation	: Class I / IP 23
Input connection	: Cable input
Dimensions	: 420 mm (length) x 140 mm (width) x 110 mm (height) (without reflector and brackets)
Weight	: Ca 6,5 kg (without mounting hooks)
Reflector	: Ecomax HR96 Reflector

CAN 400 AL

Suitable for:
120 / 208 / 240 / 277 / 347 / 480 V

The CAN 400 AL for 400W lamps is equipped with a multi-tap Philips/Advance Constant Wattage Autotransformer (CWA) ballast, which reduces the response of the lamp to a lower or higher input voltage. This provides a constant output when the input voltage is not completely stable. The multi-tap ballast is suitable for most North American supply voltages ranging from 120V to 480V.



Features/benefits

- For 400W HPS/MH S51 lamps
- Reliable magnetic ballast
- Wide range of input voltages: 120/208/240/277/347/480V
- Aluminum housing for optimal cooling
- Easy to service
- Philips/Advance components
- Ecomax HR96 reflector (96% efficiency)

“The CWA ballasts enable us to maintain **the correct light levels** throughout the greenhouse”

Recommended lamps

Lucalox PSL 230V 400W
HPI-T 400W/645

Grow light (PPF)

710 $\mu\text{mol s}^{-1}$
-

Luminous Flux

56.500 lumen
32.000 lumen

Lamp base

E39/E40
E39/E40

Technical specifications

Input Voltage : 120 / 208 / 240 / 277 / 347 / 480 V
Input current : 4,2 / 2,4 / 2,1 / 1,7 / 1,3 / 1,0 A
Real input power : 465 W ($\pm 5\%$)
Apparent power : 517 VA ($\pm 5\%$)
Power factor : $> 0,9$
Light source : HPS / MH 400W ANSI S51

Input frequency : 60 Hz
Electrical insulation : Class 1
Input connection : Cable input
Dimensions : 720 mm (length) x 240 mm (width) x 150 mm (height)
Weight : Ca 6,8 kg (without mounting hooks)
Reflector : Ecomax HR96 Reflector

CAN 600 AL

Suitable for:
120 / 208 / 240 / 277 / 347 / 480 V

The CAN 600 AL for 600W lamps is equipped with a multi-tap Philips/Advance Constant Wattage Autotransformer (CWA) ballast, which reduces the response of the lamp to a lower or higher input voltage. This provides a constant output when the input voltage is not completely stable. The multi-tap ballast is suitable for most North American supply voltages ranging from 120V to 480V.



Features/benefits

- For 600W HPS S106 lamps
- Reliable magnetic ballast
- Wide range of input voltages: 120/208/240/277/347/480V
- Aluminum housing for optimal cooling
- Easy to service
- Philips/Advance components
- Ecomax HR96 reflector (96% efficiency)

“Gavita’s approach
enabled us to
optimize our yield”

Recommended lamps

Lucalox PSL 230V 600W

Grow light (PPF)

1.080 $\mu\text{mol s}^{-1}$

Luminous Flux

90.000 lumen

Lamp base

E39/E40

Technical specifications

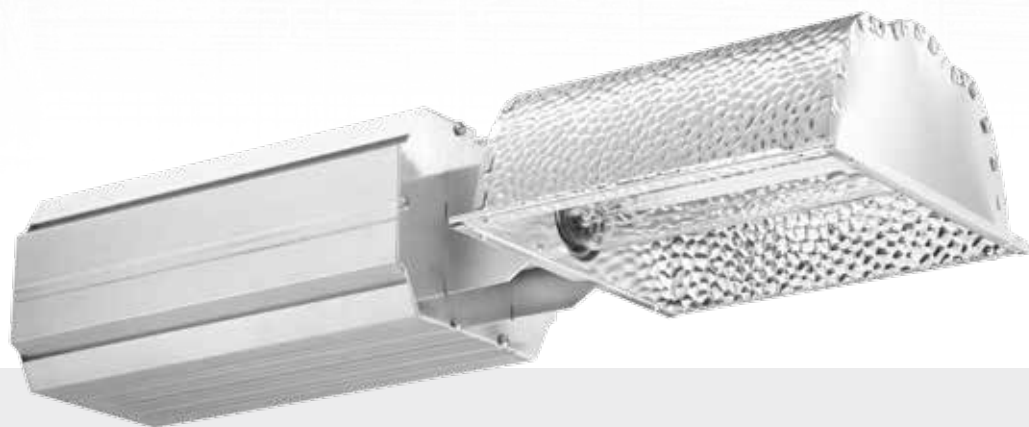
Input Voltage : 120 / 208 / 240 / 277 / 347 / 480 V
Input current : 5,7 / 3,3 / 2,9 / 2,5 / 2,0 / 1,4 A
Real input power : 675 W ($\pm 5\%$)
Apparent power : 750 VA ($\pm 5\%$)
Power factor : $> 0,9$
Light source : HPS 600W ANSI S106

Input frequency : 60 Hz
Electrical insulation : Class 1
Input connection : Cable input
Dimensions : 720 mm (length) x 240 mm (width) x 150 mm (height)
Weight : Ca 10,4 kg (without mounting hooks)
Reflector : Ecomax HR96 Reflector

CAN 750 AL

Suitable for:
120 / 208 / 240 / 277 / 347 / 480 V

The CAN 750 AL for GE Lucalox PSL 750W 230V lamps is equipped with a multi-tap Philips/Advance Constant Wattage Autotransformer (CWA) ballast, which reduces the response of the lamp to a lower or higher input voltage. This provides a constant output when the input voltage is not completely stable. The multi-tap ballast is suitable for most North American supply voltages ranging from 120V to 480V.



Features/benefits

- For 750W HPS S111 lamps
- Reliable magnetic ballast
- Wide range of input voltages: 120/208/240/277/347/480V
- Aluminum housing for optimal cooling
- Easy to service
- Philips/Advance components
- Ecomax HR96 reflector (96% efficiency)

“The 750W lamp proved to be the **perfect balance** between light level and uniformity”

Recommended lamps

Lucalox PSL 230V 750W

Grow light (PPF)

1.320 $\mu\text{mol s}^{-1}$

Luminous Flux

112.000 lumen

Lamp base

E39/E40

Technical specifications

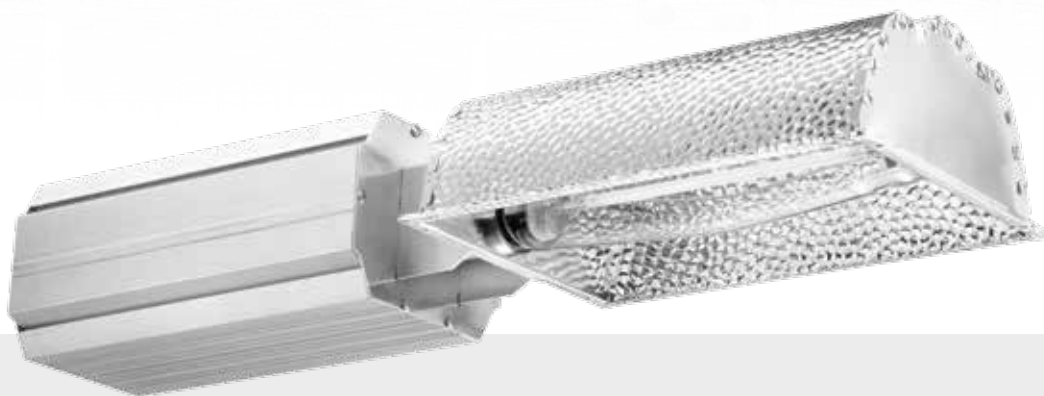
Input Voltage : 120 / 208 / 240 / 277 / 347 / 480 V
Input current : 6,8 / 4,0 / 3,5 / 3,1 / 2,5 / 1,8 A
Real input power : 840 W ($\pm 5\%$)
Apparent power : 933 VA ($\pm 5\%$)
Power factor : $> 0,9$
Light source : HPS 750W 230V ANSI S111

Input frequency : 60 Hz
Electrical insulation : Class 1
Input connection : Cable input
Dimensions : 720 mm (length) x 240 mm (width) x 150 mm (height)
Weight : Ca 14 kg (without mounting hooks)
Reflector : Ecomax HR96 Reflector

CAN 1000 AL

Suitable for:
120 / 208 / 240 / 277 / 347 / 480 V

The CAN 1000 AL for 1000W HPS lamps is equipped with a multi-tap Philips/Advance Constant Wattage Autotransformer (CWA) ballast, which reduces the response of the lamp to a lower or higher input voltage. This provides a constant output when the input voltage is not completely stable. The multi-tap ballast is suitable for most North American supply voltages ranging from 120V to 480V.



Features/benefits

- For 1000W HPS/MH S52 lamps
- Reliable magnetic ballast
- Wide range of input voltages: 120/208/240/277/347/480V
- Aluminum housing for optimal cooling
- Easy to service
- Philips/Advance components
- Ecomax HR96 reflector (96% efficiency)

Recommended lamps

Philips Agrolite XT 1000W
Philips C1000 S52 ALTO
Philips 1000W/635 BT37

Grow light (PPF)

1.850 $\mu\text{mol s}^{-1}$
-
1.075 $\mu\text{mol s}^{-1}$

Luminous Flux

146.000 lumen
130.000 lumen
85.000 lumen

Lamp base

E39
E39
E39

Technical specifications

Input Voltage : 120 / 208 / 240 / 277 / 347 / 480 V
Input current : 9,5 / 5,5 / 4,8 / 4,2 / 3,3 / 2,3 A
Real input power : 1100 W ($\pm 10\%$)
Apparent power : 1182 VA ($\pm 10\%$)
Power factor : > 0,93
Light source : HPS/MH 1000W

Input frequency : 60 Hz
Electrical insulation : Class 1
Input connection : Cable input
Dimensions : 810 mm (length) x 240 mm (width) x 150 mm (height)
Weight : Ca 18 kg (without mounting hooks)
Reflector : Ecomax HR96 Reflector

GAN Interlight 230V

Available for:
250 W | 400 W



The GAN Interlight fixture is designed for use between high plant rows, especially for cucumbers, to provide additional assimilation light where vertical lighting is not sufficient. The GAN Interlight is available as a single or triplet fixture and contains either 250 W or 400 W electromagnetic ballasts. The installation height is adjustable.

Features/benefits

- For 250 or 400W HPS/MH lamps
- Reliable magnetic ballast
- Aluminum housing for optimal cooling
- Easy to service
- Tridonic components

Recommended lamps

GreenPower CG T 250W
Plantastar inter 250W
GreenPower CG T 400W
Lucalox PSL 230V 400W
Plantastar 230V 400W

Grow light (PPF)

422 $\mu\text{mol s}^{-1}$
420 $\mu\text{mol s}^{-1}$
725 $\mu\text{mol s}^{-1}$
710 $\mu\text{mol s}^{-1}$
725 $\mu\text{mol s}^{-1}$

Luminous Flux

33.300 lumen
33.200 lumen
58.500 lumen
56.500 lumen
56.500 lumen

Lamp base

E40
E40
E40
E40
E40





GAN Ecomax

Reflectors



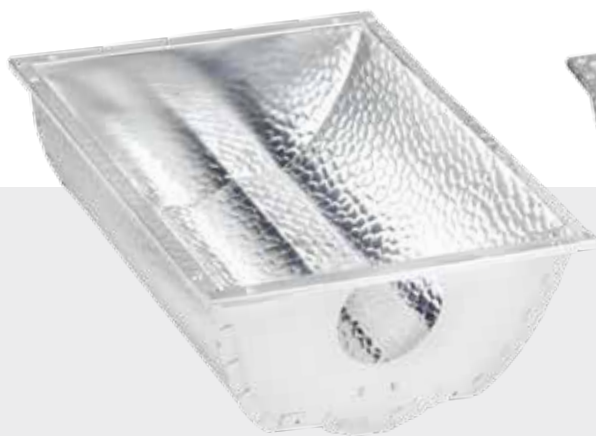
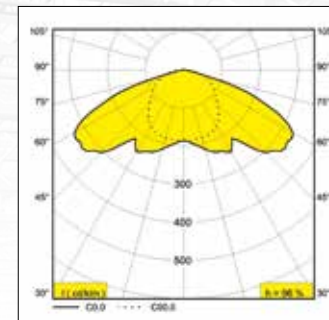
GAN Ecomax HR96

Available for:
GAN / CAN / HS2000 / PL94

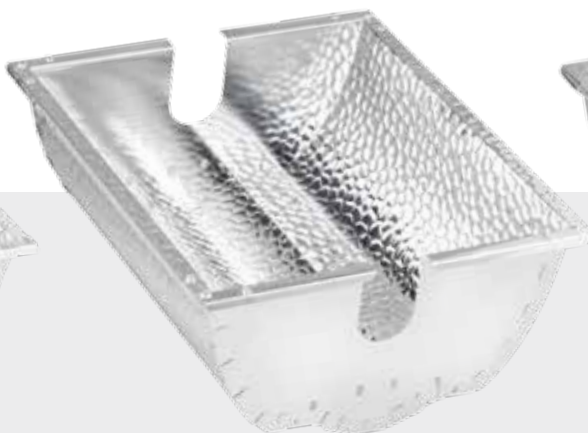
The Ecomax HR96 reflector is our flagship reflector. This hand made precision reflector is unsurpassed in performance. It is available for all GAN fixtures (except the LEP fixtures), either with single ended or double ended lamps. HS2000 and PL 94 adapters are available to refit your existing fixtures. A special edition is the asymmetrical reflector which can be used to reduce light losses to walls.

Features/benefits

- Reflector efficiency 96%
- High grade Miro/vega aluminum
- High reflective maintenance
- Excellent uniformity
- Suitable for all GAN HPS/MH fixtures
- Adapters available for HS2000 and PL94



HR96 single ended



HR96 double ended



HR96 asymmetric

*Miro is a registered trade mark of ALANOD GmbH & Co
vega is a registered trade mark of Almeco S.p.A.*

GAN Ecomax Inlay reflector

Available for:
HR96 | GAN Deep

Instead of replacing your complete reflector you can choose to only renew the Miro/vega reflective surface by inserting an inlay reflector. This is a cost effective way to renew your reflectors. There are inlay reflectors available for the HR96 and the GAN Deep reflectors.

Features/benefits

- High grade Miro/vega aluminum
- Cost effective solution
- Easy to mount without any tools (click in and bend)
- Excellent performance
- Available for the HR96 reflector and as an upgrade to the GAN Deep anodized reflector

“The HR96 reflector proved to be **most efficient**”



HR96 with inlay reflector

Reflectors are a very important part of your installation. Up to 67% of the emitted light is reflected light. Dust, pesticide deposits and calcium deposits from damp cause your reflector to degrade, so they must be cleaned or replaced regularly.

Miro and vega aluminum reflectors have the best reflectivity but can only be cleaned with specialized equipment. Cleaning can scratch the surface, resulting in a less than optimal performance. However, they can be refitted with cost effective inlay reflectors to renew the reflective material.

Anodized reflectors are more sensitive to picking up particles that degrade the reflection, but they can be re-anodized to give them a second life.

GAN Medium / Deep

Available for:
GAN / CAN Electromagnetic

The GAN Medium reflector can be used when there is only limited height or when medium to low light levels are required. It offers excellent uniformity. The reflector can be re-anodized for an extremely long life span.

Features/benefits

- Anodized aluminum reflector
- Suitable for low level lighting and medium to low light levels
- High reflective surface
- Can be re-anodized for long life span



GAN Medium

The GAN Deep reflector is suitable when you need a deep penetration in your crop and have enough height. The highly reflective material can be re-anodized, increasing the life span of the reflector, but there is also a Miro/vega aluminum inlay reflector available.

Features/benefits

- Anodized aluminum reflector
- Suitable for high intensity lighting
- High reflective surface
- Can be re-anodized for long life span
- Miro/vega aluminum inlay reflector available for reflector maintenance



GAN Deep



HPS MH / LEP

Light sources

Philips HPS lamps



GreenPower CG T 250W



GreenPower 600W 400V EM



GreenPower Plus 600W 400V EL



GreenPower CG T 400W



GreenPower Plus 1000W 400V EL



GreenPower CG T 600W



Philips Agrolite XT 1000W

230V					400V				
Type		PPF ($\mu\text{mol s}^{-1}$)	Luminous flux (Lumen)	Lamp base	Type		PPF ($\mu\text{mol s}^{-1}$)	Luminous flux (Lumen)	Lamp base
GreenPower CG T 250W	High Pressure Sodium	422	33.300	E39/E40	GreenPower 600W EM	High Pressure Sodium	1.120	87.500	E39/E40
GreenPower CG T 400W	High Pressure Sodium	725	58.500	E39/E40	GreenPower Plus 600W EL	High Pressure Sodium	1.190	89.000	E39/E40
GreenPower CG T 600W	High Pressure Sodium	1.100	88.000	E39/E40	GreenPower Plus 1000W EL	High Pressure Sodium	2.100	150.000	K12 x 30s
					GreenPower 600W 480V	High Pressure Sodium	1.200	84.500	E39/E40
					Philips Agrolite XT 1000W	High Pressure Sodium	1.850	146.000	E39
					Philips C1000 S52 ALTO	High Pressure Sodium	-	130.000	E39

General Electric & Osram **HPS** lamps



Lucalox PSL 230V 400W



Lucalox PSL 750W



Plantastar 400W



Lucalox PSL 230V 600W



Plantastar 600W



Lucalox PSL 400V 600W



Plantastar inter 250W



Plantastar 600W 400V

General Electric	Type	PPF ($\mu\text{mol s}^{-1}$)	Luminous flux (Lumen)	Lamp base
230V				
Lucalox PSL 230V 400W	High Pressure Sodium	710	56.500	E39/E40
Lucalox PSL 230V 600W	High Pressure Sodium	1.080	90.000	E39/E40
Lucalox PSL 230V 750W	High Pressure Sodium	1.320	112.000	E39/E40
400V				
Lucalox PSL 400V 600W	High Pressure Sodium	1.120	85.000	E39/E40
Lucalox PSL 400V 750W	High Pressure Sodium	1.360	104.000	E39/E40

Osram	Type	PPF ($\mu\text{mol s}^{-1}$)	Luminous flux (Lumen)	Lamp base
230V				
Plantastar inter 250W	High Pressure Sodium	420	33.200	E40
Plantastar 400W	High Pressure Sodium	725	56.500	E40
Plantastar 600W	High Pressure Sodium	1.100	90.000	E40
400V				
Plantastar 600W 400V	High Pressure Sodium	1.150	87.000	E40

Gavita Pro HPS lamps

NEW
lamps
2014



Gavita Pro 750W 400V EL DE



Gavita Pro Plus 1000W 400V EL DE

Gavita is proud to introduce their new line of horticultural double ended lamps. These lamps are optimized for PAR output and long light maintenance. Produced in Europe they offer excellent value and quality.

The Gavita Pro 1000W 400V EL DE is suitable for high frequency electronic ballasts, such as used in our GAN Electronic 1000W fixtures.

The double ended Gavita Pro 750W 400V EL DE lamp is unique in the market and specifically developed for our GAN Electronic 750W DE fixture. It produces 8-10% more PAR light than the current generation single ended 750W 400V lamps.

	Type	PPF ($\mu\text{mol s}^{-1}$)	Luminous flux (Lumen)	Lamp base
400V				
Gavita Pro 750W 400V EL DE	High pressure sodium	1.500	111.900	K12 x 30s
Gavita Pro Plus 1000W 400V EL DE	High Pressure Sodium	2.100	150.000	K12 x 30s

Metal Halide & Plasma Lamps



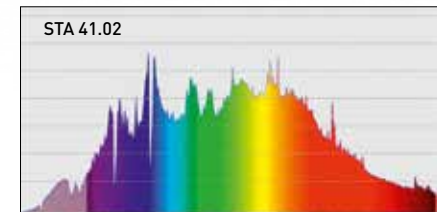
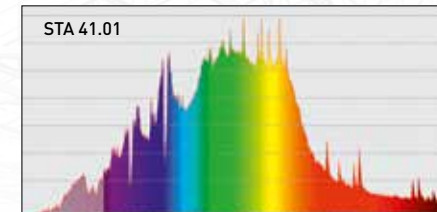
Philips HPI-T 400W/645



Osram Powerstar HQI 400W



LUXIM STA 41.01 / 41.02



	Type	PPF ($\mu\text{mol s}^{-1}$)	Luminous flux (Lumen)	Lamp base		Type	PPF ($\mu\text{mol s}^{-1}$)	Luminous flux (Lumen)	Rated lifetime
230V									
Philips HPI-T 400W/645	Metal Halide	-	32.000	E39/E40	LUXIM STA 41.01	Light Emitting Plasma	310	21.000	50.000 hrs
Osram Powerstar HQI 400W	Metal Halide	-	32.000	E39/E40	LUXIM STA 41.02	Light Emitting Plasma	300	17.000	30.000 hrs
Philips 1000W / 635 BT37	Metal Halide	1.075	85.000	E39/E40					

References

Company	Crop	Fixture	Quantity
Fruits and vegetables			
Van der Kaay	Tomato	600/1000W electronic	40.000
Kazagro	Cucumber/Tomato	750W electromagnetic	11.000
J. Sigg	Cucumber	600W electromagnetic	8.000
Howard Huy Farms	Mini cucumber	600W EM / 1000W EL	7.900
Wiig	Cucumber/Tomato	750W electromagnetic	6.000
Tråskbøle	Cucumber/Tomato	600W electromagnetic	5.000
L. Beirinckx	Tomato	1000W 400V EL	4.200
Smiths Garden	Tomato	750W electromagnetic	4.000
Swegro	Herbs, lettuce	750W electromagnetic	3.000
Bushelboy farms	Tomato	750W electronic	2.200
Flowers			
Ascania Flora	Roses	1000W electronic	26.000
Van den Berg Roses	Roses	1000W electronic	16.000
Porta Nova	Roses	600/1000W electronic	15.000
South Agro	Roses	1000W electronic	10.000
Rozenhof	Roses	750/1000W electronic	6.600
Bredefleur	Lilly	750W electronic	4.000
Florist Holland	Gerbera	1000W electronic	1.300
Plants & grass			
Stadium Grow Lighting (SGL)	Grass	600/750/1000W electronic	30.000
Andersen	Potted plants	750W electromagnetic	5.000
Roses Forever	Pot roses	750W electromagnetic	5.000
Ra	Potted plants	750W electromagnetic	4.000
Ontario Plant Propagation	Cucumber/Tomato	1000W EM, EL / 750W EM	3.000
Metrolina Greenhouses	Bedding plants	1000W electromagnetic	3.000
Sjaloom	Potted plants	1000W electronic	1.000



Contact Gavita

To speak with a Gavita representative close to you contact our offices in Norway, The Netherlands, Canada, Ukraine or Russia. Our lighting consultants can design optimal lighting plans for your specific greenhouse or climate room using specialized calculation software. Contact us for more information.

Gavita serves customers world-wide through a network of specialized partners.



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“Gavita sets **new standards**
in the lighting industry”

